AMICUS CAPITAL PARTNERS | Altum Credo Home Finance | The Digital Fifth

TRANSFORMING SECURED LENDING



Re-imagining Home Loans:

Unlocking Speed and Efficiency through Digital Transformation

Foreword

The home loan sector is on the verge of a groundbreaking transformation, driven by the vast potential of digital technologies, rising GDP growth, and the opportunities presented by an under penetrated market. I believe that digitization is not merely an option but a necessity to re-imagine the home loan landscape, making it more efficient, customer-centric, and future-ready.

India's housing loan market, valued at ₹27.37 trillion in 2024, is projected to grow to ₹46.60 trillion by 2029, showcasing remarkable growth in recent years. With outstanding individual home loans growing at a 16.4% from FY23 to FY24, the sector demonstrates immense potential for transformation and innovation. This report delves deep into how advanced technologies like AI-driven analytics, automated valuation models, and *phygital* approaches—seamlessly blending physical and digital touch-points—can address inefficiencies, reduce turnaround times, and elevate customer satisfaction. It highlights the role of regulatory support and key government initiatives, such as Pradhan Mantri Awas Yojana (PMAY), RERA, and the India Stack framework, which have laid the groundwork for this evolution. These initiatives have not only created a favorable ecosystem for innovation but also positioned lenders to expand into under penetrated markets with greater efficiency and scale.

The report emphasizes that embracing these innovations can help lenders to streamline operations, enhance customer experiences, and unlock new revenue opportunities. By improving operational efficiency, reducing costs, and expanding market reach—especially in rural and under served segments—lenders can achieve sustainable growth while contributing to broader financial inclusion. Additionally, this report provides an in-depth analysis of the home loan lifecycle, spotlighting common market practices, challenges, and operational inefficiencies observed in the market.

The insights and recommendations presented here have been derived through conversations with Banks, NBFCs, HFCs, and investors. The experiences and feedback underscore the immense opportunities in how the home loan journey can be redefined, creating a future that is not just digitally efficient but also economically impactful and socially inclusive. The insights are from a broad market perspective and can serve as a foundation for stakeholders across the spectrum to adapt to their unique circumstances.

Let’s together create a future where housing finance is not only seamless but also a driver of sustainable growth and inclusion.

MEET THE AUTHORS



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ABOUT THE DIGITAL FIFTH

Organiser of Bharat Fintech Summit, one of the largest & most influential Fintech event in India.

Amongst the Largest Player in Asia.

1st in India to provide practical and pioneering training programs in Fintech and Digital Finance.

CONSULTANCY SERVICES

Digital Strategy

Building vision and roadmap for the organizations to embark on the Digital Journey

Product Management

Assisting in building Digital Products through Benchmarking, PRD, BRD and Optimized Journeys

Program Management

Setting and implementing robust program governance framework for executing critical and time-bound programs

Regulatory Compliance Framework

Overview of the current compliance practices and regulatory policies to build best compliance practices

Technology Advisory

Studying the technology architecture, platforms, cybersecurity frameworks to ensure scalability, security and sustainability

Process Optimization

Assist in understanding current processes and research through market practices to design the optimal processes

CORPORATE TRAINING



PARTNERSHIPS



Amicus Capital is an India-dedicated growth capital fund set-up by experienced PE professionals. The Firm currently has assets under management of $280 million across two funds.

Amicus Capital is focused on investing in sectors where the investment team has deep experience and networks – financial services, consumer, healthcare, technology & business services, and specialty manufacturing. The Fund seeks to invest in capital efficient and fast-growing businesses looking to scale-up once the business model is proven and partners with entrepreneurs to create segment/category leaders.

www.amicuscapital.in

Altum Credo Home Finance Private Limited (ACHF) is a Housing Finance Company registered with the National Housing Bank and headquartered in Pune, with operations across Maharashtra, Tamil Nadu, Karnataka, Rajasthan, Andhra Pradesh, and Telangana.

With a commitment to financial accessibility, the company empowers first-time home buyers by offering tech-driven, affordable housing finance solutions by delivering personalized, best-in-class services at affordable EMIs. The company caters to customers traditionally excluded from formal long-term financing channels.

www.altumcredo.com

The report has been prepared by The Digital Fifth with insights, advise, and inputs from Amicus Capital Partners and Altum Credo Home Finance Private Limited.

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EXECUTIVE SUMMARY

India's home loan sector is undergoing a transformative shift, fueled by strong GDP growth, a rising working population, and increasingly aspirational customers. With outstanding individual home loans reaching ₹27.37 trillion in FY24—growing at 16.4% year-on-year—the demand for housing finance has never been stronger. However, this growth is hindered by inefficiencies in the lending process, from cumbersome documentation to slow approvals and manual underwriting that adds cost and friction for both lenders and borrowers.

Digital transformation is no longer optional—it is imperative. The India Stack framework has revolutionized financial services, with Aadhaar-based eKYC, UPI, and the Account Aggregator framework enabling seamless, consent-driven data sharing. These innovations have reduced onboarding time from days to minutes, improving credit assessments and financial access. Yet, major bottlenecks remain, particularly in legal verification, property valuation, and land record digitization. While nearly 80% of secured lending processes can now be automated, the remaining 20%—which involves complex, manual workflows—continues to slow down the system.

Customer experience in home loans lags behind other lending segments, weighed down by lengthy turnaround times, redundant paperwork, and a lack of transparency. Legacy systems and high staff attrition further compound these challenges. Because home loans are infrequent, digitization in this space has historically been deprioritized, even as demand for a faster, more seamless experience grows. The solution lies in AI-driven analytics, automated valuation models, and hybrid 'phygital' approaches that combine digital efficiency with human support to simplify due diligence and verification.

Government policies such as Pradhan Mantri Awas Yojana (PMAY) and RERA are playing a critical role in expanding financial inclusion and driving innovation. By encouraging digitization, streamlining approvals, and enforcing transparency, these reforms are helping reduce friction and improve trust in the system. Faster processes, lower costs, and broader market reach will not only benefit lenders but also ensure housing finance is accessible to millions of Indians.

The future of home loans will be shaped by those who embrace technology, rethink customer experience, and leverage data to unlock new opportunities. As the sector evolves, the organizations that lead with digital-first solutions will define the next era of housing finance. It's time to reimagine home loans—not just to meet demand, but to create a system that is efficient, inclusive, and built for the future.

This report explores the potential of digital transformation to revolutionize the home loan landscape in India and analyzes how to strike the right balance between the traditional human-centric approach to home loans and the efficiencies of digitization.

01 INTRODUCTION TO HOME LOANS

INTRODUCTION TO HOME LOANS
HOME LOAN PRODUCT SUITE
MARKET OVERVIEW
HOME LOAN LANDSCAPE
KEY OPPORTUNITIES



1.1 INTRODUCTION TO HOME LOANS

Purpose

Home loans are financial products designed to help individuals purchase, construct, or renovate residential properties



Home ownership



Construction & Renovation



Investment

Providers

A wide range of financial institutions in India offer home loans, catering to diverse customer segments and needs. These providers include:



Commercial Banks
Co-operative Banks



Societies



HFCs
NBFCs

Underwriting

Home loans are secured loans, backed by the property being purchased as collateral



Property as Collateral

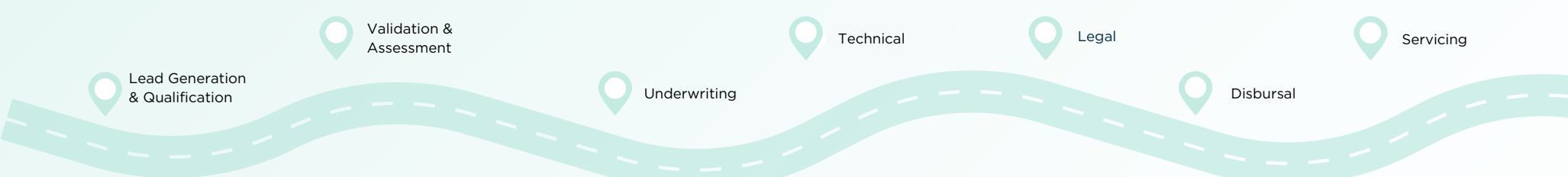


Loan-To-Value Ratio



Creditworthiness of Borrower

Steps for Home Loans:



1.2 HOME LOAN PRODUCT SUITE

HOME LOANS

Purpose Purchase of residential properties (ready/under construction), resale properties, balance transfer

Segment Salaried, self-employed professionals, and non-professionals

PLOT LOANS

Purpose Purchase of residential plots within approved layouts or municipal limits

Segment Salaried, self-employed professionals, and non-professionals

HOME EXTENSION LOANS

Purpose Adding additional rooms or floors to an existing residential property

Segment Salaried, self-employed professionals, and non-professionals



HOME CONSTRUCTION LOANS

Purpose Construction of a residential property

Segment Salaried, self-employed professionals, and non-professionals

HOME IMPROVEMENT LOANS

Purpose Renovation, repairs, or upgrading existing residential properties

Segment Salaried, self-employed professionals, and non-professionals

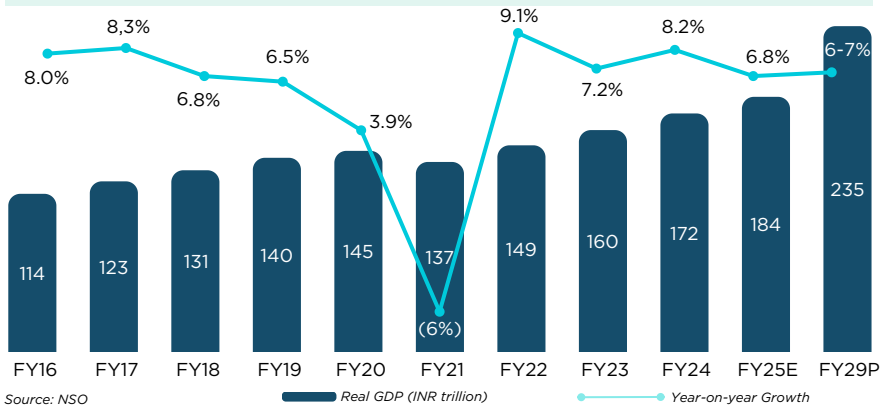
COMMERCIAL PROPERTY LOANS

Purpose Purchase or construction of commercial properties

Segment Business owners and self-employed individuals

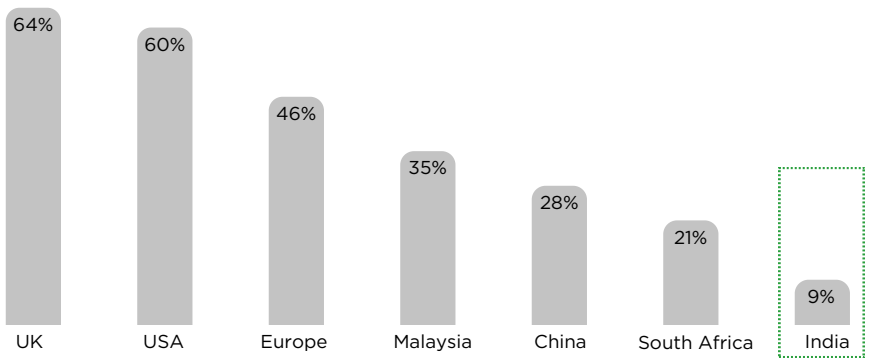
1.3 MARKET OVERVIEW

India's economy to grow > 6% from FY25



Source: NSO

India's Mortgage to GDP Ratio lowest compared to peers



Source: FY23; HOFINET, European Mortgage Federation, NHB, CRISIL MI&A, 2023;

Favorable demographics & Rapid Urbanization driving demand for housing

Demographic Dividend

67%

Population of working age (<50 yrs)

Nuclear Household

Average household size has reduced from 5.5 in 1991 to 4.8 in 2011

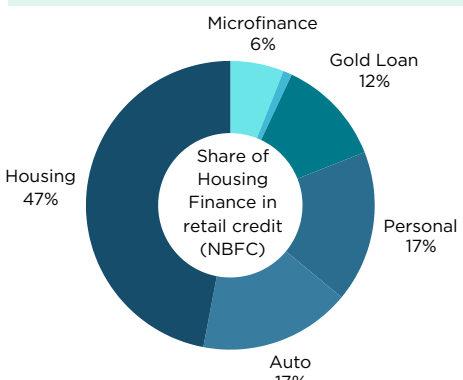
Urbanization

40% Urban Population in 2030

28% Urban Population in 2011

Source: World Economic Forcum, CRISIL, World Urbanisation Prospects

Shortage despite 47% share of housing finance in retail credit



Source: CRISIL, Planning Commission

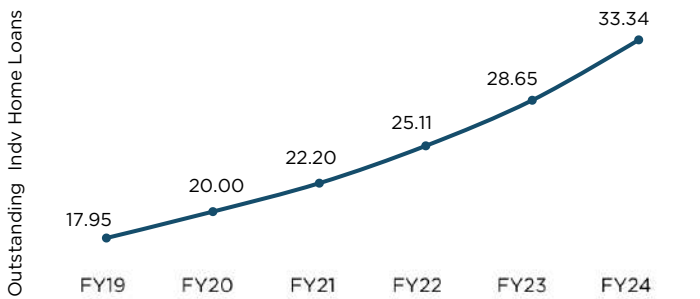
100 mn
Housing Shortage

95 mn
Affordable Housing Shortage

1.4 HOME LOAN LANDSCAPE

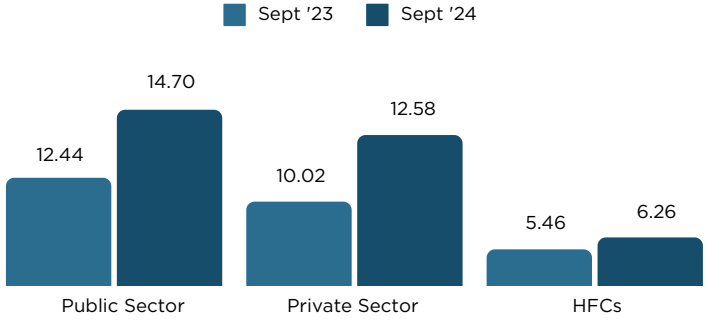
The housing finance sector comprises key players such as Public Sector Banks (PSB), Private Sector Banks (PVB) and Housing Finance Companies (HFCs), channeling financial resources and enabling formal housing credit for the sector.

Outstanding Individual Home Loans



Source: NHB **Values in INR Trillion*

Individual Housing Loan (IHL) Outstanding of Lenders



Source: NHB'24, The Digital Fifth Analysis **Values in INR Trillion*

The outstanding individual home loans grew at **16.4%** from FY23 to FY24, reflecting strong market growth.

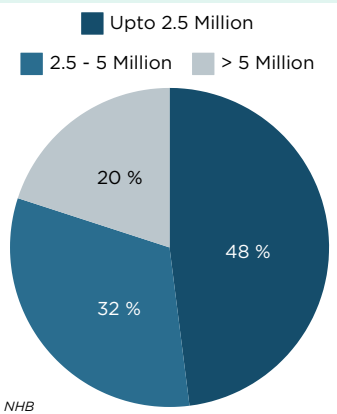
Source: The Digital Fifth Analysis

Individual Housing Loan outstanding (by provider)

18%	**43%**	**39%**
HFCs	PSBs	PVBs

As of Sept'24

Percentage Share of IHL Outstanding of HFCs (March 2024)

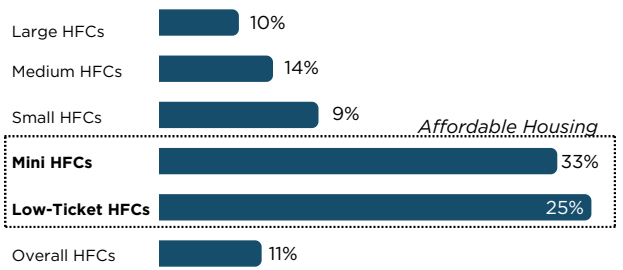


Source: NHB

48% of individual housing loans from Housing Finance Companies fall under the up to ₹2.5 Million outstanding loan segment.

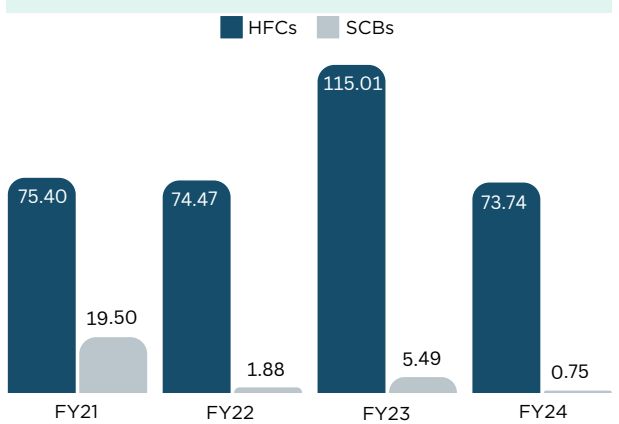
HFC Portfolio growth over time

5 year CAGR (FY 18-23) of different HFC groups



Source: Industry report on housing finance focused on low income housing segment

Affordable Housing Loan Disbursement



Source: NHB **Values in Billions*

1.5 KEY OPPORTUNITIES

Digitization and Tech-First Borrowers

While digitization in the home loan sector has made significant strides, opportunities for further refinement remain. With a growing base of tech-savvy customers, Do-It-Yourself (DIY) digital journeys can transform borrower experiences by enabling self-service for loan applications, document uploads, and status tracking.

These journeys not only enhance borrower convenience but also drive cost savings for lenders by reducing manual intervention and shortening Turnaround Times (TAT). By integrating AI-driven credit assessments and real-time data analytics, lenders can tap into this potential to cater to evolving borrower preferences while ensuring operational efficiency.

Reduced Turnaround Time (TAT)
Digital workflows and AI-powered underwriting minimize manual interventions, reducing loan processing times significantly.

Cost Efficiency for Lenders
Automation lowers operational costs, replacing manual tasks like document verification and loan assessments with streamlined digital systems.

Partnership based Lending

Partnership of banks with NBFCs for co-lending and Fintechs for sourcing to leverage their digital sourcing capabilities.

Enabling NBFC or Fintech to cater to large amount of customer base with lesser capital by leveraging large balance sheet of partners.

Diversified sales channel and digital sourcing

Customer Experience enhancement and personalization of products

Collaborative Ecosystem

Unifying valuers, legal experts, technology providers, proptech players, and builders can greatly enhance efficiency and transform the home loan process.

Reduced inefficiencies

Targeted marketing and customized loans

Digitization of Legal & Technical Verification

Digitizing land records and registration, combined with the usage of LLMs and AI for data matching, can streamline the home loan process and improve efficiency through standardization.

Faster Document Verification

AI enhances accuracy, minimizing fraud

ONDC Open Network for Digital Commerce

ONDC has launched unsecured personal loans and plans to expand into other unsecured products. After stabilizing these, the organization will focus on secured lending products like home loans.

Standardized & Streamlined Processes

Ecosystem Development

Broader Financial Inclusion

Enhanced Market Reach

Source: ONDC

Green Financing

The rise in demand for eco-friendly homes offers lenders growth opportunities, with government incentives like higher Floor Area Ratio, fast-track clearances, NHB refinancing, and reduced stamp duty & property tax for green home loans.

Attractive Loan Products

Expanded Market

Source: NHB

02 MARKET DYNAMICS

INDIAN HOME LOAN ECOSYSTEM
MAJOR REGULATORY INFLUENCES
GOVERNMENT & REGULATORY SUPPORT
KEY ISSUES IN HOME LOAN



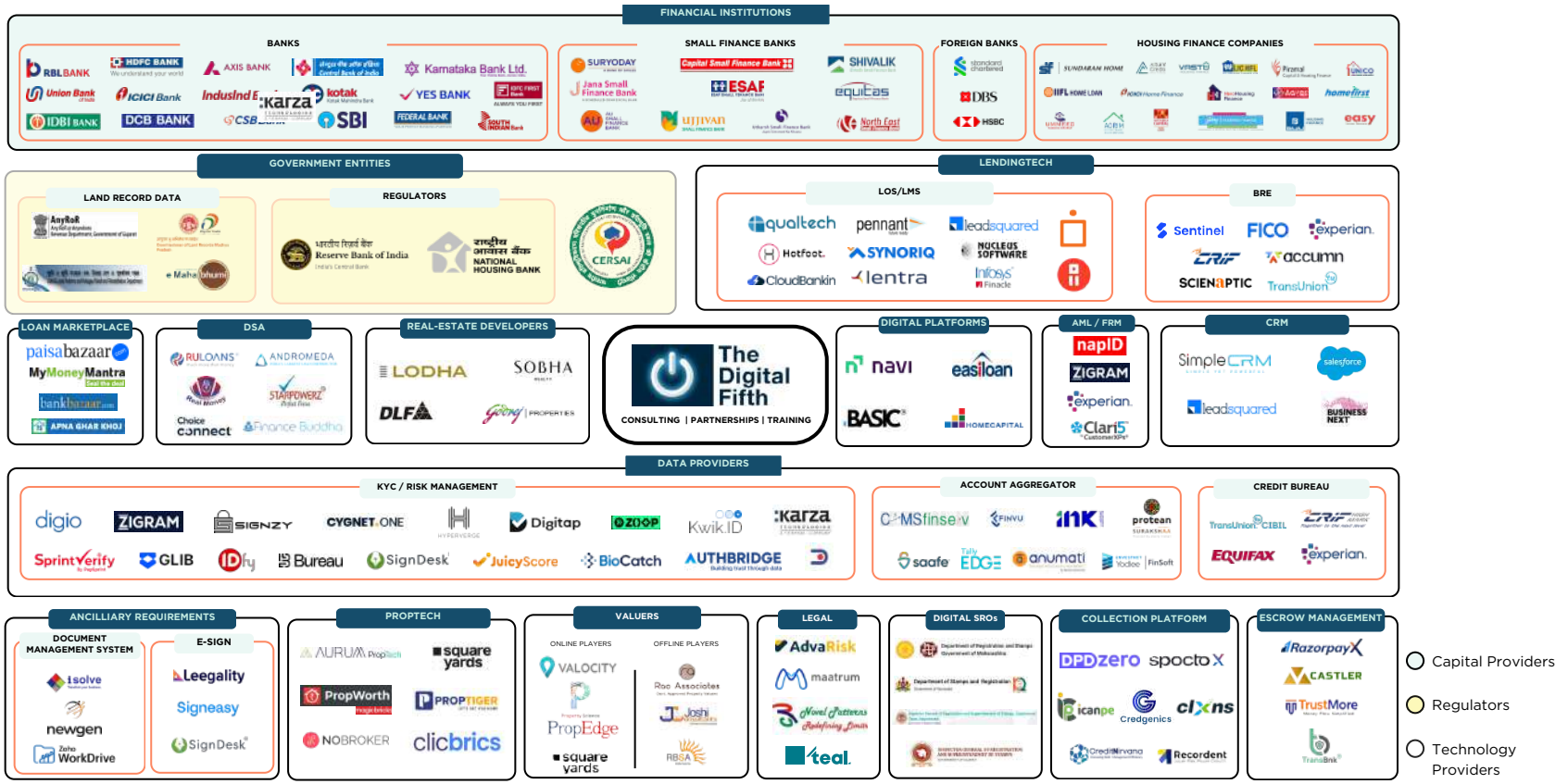


Sandeep Menon
Founder, MD & CEO
Vastu Housing Finance

"The market is rapidly advancing in digitization, yet a fully seamless and integrated customer experience remains an aspirational goal for many. As companies prioritize customer-centric strategies, they are making significant strides in leveraging digital ecosystems like land records, KYC, account aggregators, etc., to streamline the home loan process. This transformation is driving faster approvals and disbursements, enhancing overall efficiency. With standardized procedures and digital platforms improving scalability and customer experience, the vision of a fully digital home loan process is progressing at pace."

2.1 INDIAN HOME LOAN ECOSYSTEM

This Ecosystem incorporates institutions that originate loans, facilitators who streamline the process, lenders supplying the capital, service providers managing back-office functions, technology partners, builders enabling home ownership, and regulatory bodies overseeing the entire process



This ecosystem is representative and not exhaustive.

2.2 MAJOR REGULATORY INFLUENCES

Focusing on the opportunities highlights how regulatory frameworks can foster growth, innovation, and stability in the home loan sector, benefiting both borrowers and lenders.

GOVERNMENT AUTHORITIES	POLICY & OBJECTIVE	OPPORTUNITIES
भारतीय रिज़र्व बैंक Reserve Bank of India India's Central Bank	• **Prudential Norms**: Manages housing loan risks through LTV ratios and risk weights, outsourcing guidelines, ensuring financial stability. • **Interest Rate Guidelines:** Ensures transparency and fairness in loan interest rates. • **Customer Protection:** Mandates robust grievance redressal mechanisms to protect borrowers. • **Proactive Monitoring**: Early Warning System (EWS) facilitates continuous surveillance of transactions, allowing for the early identification of anomalies indicative of fraudulent activities. • **Focus on Housing for individuals:** Principal Business Criteria (PBC) ensures that the housing finance companies are extending loans to individuals and promoting house ownership in the country	• **Risk Optimization:** Ensures stability by targeting low-risk segments and optimizing credit portfolios. • **Transparent Lending Practices:** Attract borrowers with transparent and competitive interest rates to build trust and expand the customer base. • **Customer Relationship Strengthening:** Strengthen customer relationships and loyalty by implementing robust grievance redressal mechanisms and positioning as a borrower-friendly lender. • **Automated Monitoring:** The EWS automates risk monitoring which reduces the need for manual checks, improving operational efficiency, lowering costs, and enabling faster decision-making. • **Growth Through Acquisition:** Opportunity to acquire portfolios of existing NBFCs, increasing market share and leveraging economies of scale.
राष्ट्रीय आवास बैंक NATIONAL HOUSING BANK	• **Liquidity Management :** Provides refinance facilities to HFCs and banks, ensuring liquidity in the housing finance sector. • **Supervisory Authority:** Strengthens governance in HFCs through compliance frameworks and risk management norms. • **Affordable Housing Promotion:** Supports housing for all through refinancing schemes for affordable housing projects.	• **Promote Business Expansion :** HFC's with refinance facilities have the ability to serve more customers at better rates while effectively managing credit risks. • **Governance Control:** Strong governance and controls enable borrowers to trust HFCs as lenders, resulting in higher loan uptake. • **Share in Affordable Housing Growth:** NHB has made a significant contribution to promoting housing.
CERSAI SARFAESI	• **Fraud Prevention:** Maintains a registry to prevent fraudulent property transactions. • **Ease of Verification:** Facilitates quick verification of property titles and encumbrances. • **Recovery & Lender Empowerment:** SARFAESI, provides framework for recovering NPAs, allowing enforcement without court intervention	• **Data Utilization:** Financial institutions can leverage CERSAI's data for better risk assessment and management, improving the overall loan portfolio quality.
RERA	• **Transparency**: Mandates project registration and detailed disclosures, providing buyers with essential information • **Accountability**: Ensures timely project completion and quality by holding builders accountable. • **Consumer Protection:** Offers a grievance redressal forum for buyers.	• **Consumer Confidence:** RERA's focus on transparency and accountability increases buyer confidence, leading to higher home loan uptake and greater demand for housing. • **Market Growth:** Ethical practices mandated by RERA attract more investors to the real estate sector, boosting overall market growth and stability.

2.3 GOVERNMENT & REGULATORY SUPPORT

Government Schemes and Initiatives

Digital SRO:
The rise of digital Sub Registrar Offices (SROs) standardizes processes, enhances collaboration, and streamlines workflows through digital platforms, improving efficiency and regulatory compliance in the home loan ecosystem.

Digital India Land Records Modernization Programme (DILRMP):
This initiative aims to digitize land records, making property title verification seamless and reducing legal risks. States like Telangana and Karnataka are early adopters.

RERA Integration:
The Real Estate (Regulation and Development) Act (RERA) has increased transparency and trust in the real estate sector. Digital RERA platforms streamline project approvals and property verification, reducing risks for lenders.

GST Benefits:
The government reduced GST rates on affordable housing projects to 1% (without ITC) and on under-construction properties to 5%, encouraging home buyers and increasing demand for home loans.

Rajiv Awas Yojana (RAY): Introduced in July 2009, the Rajiv Awas Yojana (RAY) aimed to eliminate slums by providing durable, affordable housing and basic facilities to urban dwellers, while promoting community involvement in planning and implementation.



Pradhan Mantri Awas Yojana (PMAY):
Under the Mission "Housing for All by 2022", two broad categories, namely Pradhan Mantri Awas Yojana (Urban) and Pradhan Mantri Awaas Yojana (Gramin), were implemented. Credit Linked Subsidy Scheme (CLSS) is a scheme under PMAY (U) to promote affordable housing for weaker sections, with NHB as the Central Nodal Agency.

- **CLSS for EWS/LIG:** As of June 30, 2024, NHB disbursed ₹397.75 Billion for loans totalling ₹1,988.34 Billion through 239 lenders, benefiting 1.6.4 Million households.
- **CLSS for MIG:** As of June 30, 2024, NHB disbursed ₹972.18 Billion (loan disbursements of ₹1.01 Trillion) to 191 PLIs, benefiting 0.46 Million households

Rural Housing Interest Subsidy Scheme (RHISS):
As of June 30, 2024, NHB executed MoUs with 100 PLIs, disbursing ₹2.43 Million in subsidies to 23 lenders, and benefiting 12,084 households.

Urban Infrastructure Development Fund (UIDF):
In the fiscal year FY 2023-24, the Bank sanctioned ₹296.8 billion and disbursed ₹1.78 billion.

Indira Awas Yojana (IAY) and Rural Housing Fund (RHF):
Subsidized housing loans for rural borrowers are provided under schemes like IAY, with a focus on underprivileged sections.

2.4 KEY ISSUES IN HOME LOANS



HIGH PEOPLE DEPENDENCY & ATTRITION

- Home loan journeys are heavily people-dependent. Starting from sourcing, verification, underwriting, disbursement and collections, each stage involves manual intervention.
- The complexity of the product and the lack of clear process deviations result in heavy reliance on human resources.
- Nearly 50% annual churn of field staff creates significant operational challenges, leading to high costs for hiring and training new staff, as well as disruptions in the loan lifecycle and customer experience.



PARTNER RELATED CHALLENGES

- The highly competitive landscape makes it challenging to establish strong and exclusive partner relationships.
- Inefficient and fragmented processes lead to delays, reducing the effectiveness of partnerships.
- The absence of clear rulebooks adds to the difficulties faced by partners during the initial stages of lead qualification
- The lack of visibility and clear communication between partners hampers trust and collaboration.



COST OF COMPLIANCE

- The RBI's tightening of regulatory norms, including mandatory monthly ALM reporting and stricter PBC compliance- which requires a majority of assets and income to be from financial activities- have significantly increased the cost burden.
- Key challenges include:
  - Managing compliance through real-time tracking and streamlined workflows to meet regulatory timelines.
  - Ensuring robust Asset Liability Management (ALM) processes to align with regulatory expectations.
  - Addressing increased operational complexity, which leads to higher compliance costs and a greater risk of non-compliance penalties.



LOW LEVEL OF DIGITISATION

- Digitization in the secured lending segment remains nascent, with limited adoption compared to the digital maturity achieved in unsecured lending.
- Customers increasingly expect a seamless and efficient digital experience in secured loans, akin to what is available in the unsecured loan space.
- The lack of digitization in secured lending leads to slower processes and greater operational inefficiencies compared to unsecured loans.

03 HOME LOAN LIFECYCLE MAPPING

HOME LOAN LIFECYCLE OVERVIEW

EMPATHISE WITH CUSTOMERS

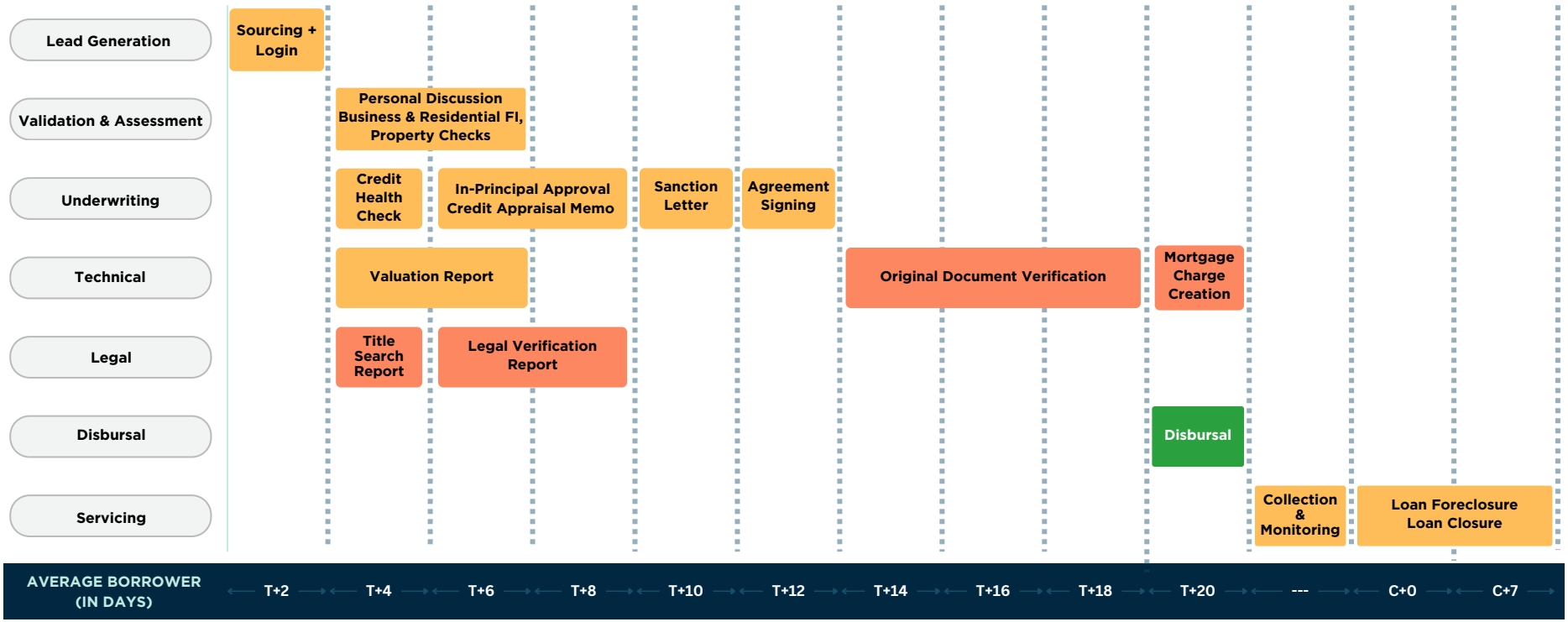




Narendra Nath Mishra
Head Retail & Agri Loans
DCB Bank

> Digitization enables companies, whether starting fresh with digital solutions or transitioning from traditional models, to automate around 80% of their secured loan processes. This can increase productivity by around 20%, but also enhances customer experiences through multichannel access and minimizes manual errors by leveraging systematic API-based approaches. While full digitization remains challenging due to legal checks and property verification, businesses are making significant strides, especially with esigning, improved centralised legal/valuation management and are poised for further improvement with digitisation of land records, more easier availability of property registration data and fraud detection with AI.

3.1 HOME LOAN LIFECYCLE OVERVIEW



Assumptions:

- T = time loan application initiated by customer
- C = time loan closure application initiated by customer
- This timeline does not apply to pre-approved properties
- Working days are considered for the timeline

Complete Digitization | Partial Digitization | Low Digitization

Digitization: Refers to extent of dependence in the journey on technology vis-a-vis human

3.1.1 HOME LOAN LIFECYCLE - LEAD GENERATION

CURRENT SCENARIO

Sourcing - Manual

- Loan Application & Document Collection
  - *Alternate Sourcing Channels (ASC)*
    - Alternate sourcing channels can leverage market reach and connector networks to engage customers seeking loans
    - Loan Application and KYC related documents are collected and screened to identify the most appropriate lender
    - Physical application form is filled with limited available details and KYC documents are shared with the lender
    - Updates regarding application are intimated by the lender manually as and when required
  - *Sales RM*
    - Sales RM contacts the customer to understand their requirements and performs an initial lead qualification
    - Physical Application form is duly filled by the RM & additional specific documents are collected as per loan scheme requirement
    - Document collection is an ongoing process throughout the entire loan journey
- The RM visits the customer's location to gather the necessary inputs & complete the application form
- Manually collected data is entered into the CRM for Lead Generation

CHALLENGES

- Lengthy and irrelevant standardized printed forms often result in incomplete submissions, requiring RMs to re-fill the forms, thus leading to increase in TAT
- Manual Document Collection and Handover process between Customer, ASC and Lender lacks a structured approach, resulting in duplication of work, inconvenience and delays
- Exchanging documents between ASCs and customers through informal communication channels results in customer discomfort due to data privacy concerns
- The requirement for a manual visit for Lead Generation is time consuming as the visit depends on the availability and comfort of the customer
- Manual lead registration may result in duplication of efforts for the RM, causing delays in the initial process
- Customers & DSAs face uncertainty and discomfort due to the lack of transparency in loan application status

SOLUTION

Digital Application Forms

- ASCs can be given access to Mobile Apps / APIs to integrate (for Digital Channels) to facilitate faster and structured data exchange with the lender, aligned with basic loan data requirements
- Well-designed documentation requirements in the Digital Channel ensures collection of required data inputs from the customers are done first
- Further Integrations with Document Management System of the lender will secure the exchange of digitally collected documents

Real-time Lead Generation

- Real-time data entry and de-duplication checks help reduce duplication of efforts, enabling quicker responses to customers and ASCs. It also provides lead identification information to facilitate tracking and monitoring of further progress.
- RMs can conduct telephonic personal discussions with customers to confirm their intent, ensure lead qualification, and verify the lead's presence.
- Customer DIY journeys can reduce these efforts subject to borrowers convenience

ASC Engagement Channel

- Enabling Digital Channel for ASC engagement will ensure timely updates of the Loan Application to alternate sourcing channels

IMPACT

- Improvement in the efficiency and productivity of Alternate Sourcing Channels
- Secured and trusted process for document collection, thus gaining customer's trust and offering convenience
- Paperless process ensures reduction in the cost of paper printing, scanning, transport and maintenance. It also improves the ease of searching for and sharing the documents within the lenders' internal departments
- Reducing physical visits to customers by RMs lowers costs and improves the TAT for lead generation.
- Providing ASCs with regular updates fosters healthy engagement, ensuring comfort and convenience at scale

Lead Generation | Validation & Assessment | Underwriting | Technical | Legal | Disbursal | Servicing

3.1.2 HOME LOAN LIFECYCLE - VALIDATION & ASSESSMENT

CURRENT SCENARIO	CHALLENGES	SOLUTION	IMPACT
KYC Verification • Borrowers provide physical identity documents, such as Aadhaar, PAN, or Voter ID during this step • OSV is conducted using the submitted physical documents for verification • During the transitional phase, this process is handled by the back office where they validate documents using trusted resources (e.g PAN through NSDL)	Manual verifications are lengthy and contribute to significant delay in the overall process	**Digital KYC** • Adoption of Digital KYC services reduces TAT for KYC Check and also helps to reduce data input requirements • Digital KYC through DIY journeys offers convenience and comfort of secured communication to customers	Automated KYC integrations can significantly reduce processing times, offering better TAT
Risk Screening • Borrowers submits bank statements, salary slips, and income tax returns (ITRs) manually to validate income eligibility • Lenders manually cross-check details such as monthly salary, average bank balance, and income tax filings • For business owners, additional financial statements (e.g., GST returns), are reviewed for authenticity	Semi-digitized methodologies may require the customer's intervention to complete the process, thus leading to delays & inconvenience	**Digital Credit Assessment** • Integration with the consent-based Account Aggregator framework enables seamless sharing of Bank Statement Data, providing a trusted data source for assessment • Digital credit assessments based on bureau and bank statement ensures standard credit policy application across the products • Initial system based bureau checks enables lenders to faster rejection of leads resulting into better management of qualified leads	Digital credit assessment enables faster rejection of unqualified leads, allowing focus on qualified ones, thereby reducing effort and cost
Risk Assessment • Original KYC document reference checks • Cross-referencing borrowers or businesses against government or international sanction lists (e.g., SEBI defaulters, AML watchlists, PEP checks for politically exposed persons, Hunter) • Geographies and market dynamics • Repeated loan applications using different details	Manual assessment of income requires a specific skillset and requires intervention by a specialised team, leading to increase in internal process overload and delays		Real-time digitized fraud checks help reduce the TAT for the validation process
	At this stage, Bureau Validation based rejections leads to redundant efforts invested during the Lead Generation process and inefficiency	**Centralized Fraud Detection** • Automated fraud checks leveraging OCR and AI/ ML driven advanced digital solutions help in improving quality checks • Deep API based integrations with trusted sources for verification helps resolve fraud concerns in real-time	Qualified applications can be leveraged for competitive pricing and customized loan offerings, enhancing the value proposition for customers
	Fraud detection relies on manual reviews, leading to higher error rates and delayed escalations		
	Limited integration of databases (e.g., CIBIL, GSTN, MCA) with internal systems, increasing verification times		

Lead Generation | **Validation & Assesment** | **Underwriting** | **Technical** | **Legal** | **Disbursal** | **Servicing**

*Applicable whenever properties are identified

3.1.3 HOME LOAN LIFECYCLE - UNDERWRITING

CURRENT SCENARIO

Credit Personal Discussions

- In-person visits are conducted to validate the borrower's intent, stability, and additional income sources (especially for self-employed or informal sector borrowers)
- For businesses, PDs involve understanding revenue models, market dependencies, and repayment trends

Credit Capability Analysis

- Verified data and FI reports, such as bureau records and bank statements, are used to assess the borrower's creditworthiness based on obligations, income, and credit policies
- In case of any policy deviation, approval is to sought from the respective authority via email
- Lenders use rule-based methodologies (like FOIR) to evaluate eligibility for the proposed loan amount

CAM + IPA

- Based on PD and credit assessments, the Credit team drafts CAM consolidating the borrower's financial data, credit history, PD outcomes, and preliminary loan limit
- An IPA, indicating the preliminary loan amount the borrower qualifies for, is issued subject to subsequent technical and legal evaluations and shared with the customer, emphasizing the conditional nature of the approved limit

CHALLENGES

Manual PDs increase the turnaround time (TAT), especially when multiple stakeholders (e.g., self-employed borrowers) are involved

Credit team may opt for manual calculation in Excel due to the complexity of credit policies and the variety of products, increasing the risk of errors

Current methods rely heavily on manual interpretation, overlooking opportunities for AI/ML-driven insights into creditworthiness and repayment capacity.

CAM preparation is a labor-intensive process, prone to human errors, especially for borrowers with diverse income streams or irregular financial behavior

Borrowers often assume the In-Principal Approval to be a final sanction, leading to dissatisfaction if technical or legal evaluations reduce the loan limit

SOLUTION

Virtual PD

- The usage of AI-driven virtual PD platforms for preliminary discussions through automated video calls eliminates the need for in-person visits
- AI tools can be used to identify inconsistencies or red flags during discussions.

Business Rule Engines

- BREs are equipped with rule-based automated decision-making capabilities and real-time data integration with external data sources, enabling accurate risk assessment in-line with credit policies
- New-age BREs are cloud compatible and highly configurable, offering flexibility and scalability
- BREs can be enhanced to manage the deviation approval matrix, enabling system-based approvals through proper configurations and eliminating the need for email communications
- Automated BREs can also simplify the CAM preparation by leveraging integration and calculation capabilities

Clear IPA Communication

- The borrower communication & portal must include the conditional nature of the In-Principal Approval and call out pending steps for final sanction letter

IMPACT

Reduced dependency on physical visits eliminates location-specific practices, ensuring a unified customer experience and reduction in costs

AI-Powered Underwriting will significantly reduce manual intervention, eliminating human errors and delays in financial assessment.

Real-time data integration ensures lenders stay updated with the borrower's financial health.

Faster In-Principle Approvals (IPA) with AI-powered BRE reduces the processing time to minutes, aligning with digital-first lender standards.

Lead Generation | Validation & Assessment | **Underwriting** | Technical | Legal | Disbursal | Servicing

3.1.4 HOME LOAN LIFECYCLE - TECHNICAL

CURRENT SCENARIO

Property Document Submission

- Borrowers submit property-related documents, such as title deeds, sale agreements, approved building plans, and encumbrance certificates**
- Documents are often collected manually during visits or uploaded on semi-digital platforms

Property Valuation

- External valuation agencies or internal technical teams or both conduct property valuations to verify the location, dimensions, condition and estimate the market value based on comparable properties in the area
- For under-construction properties, the technical team verifies the construction stage & developer compliance with approved plans (as applicable)
- Physical visits are conducted to cross-check claims against actual progress

Technical Valuation Report

- A technical valuation report is prepared and reviewed by technical experts to assess the property's market value, location, condition, and risks, such as zoning violations, structural issues, or illegal acquisitions
- The report and remarks are shared with Credit Teams for further processing
- Borrowers frequently encounter variations in valuations across lenders

CHALLENGES

- Ensuring the reliability and quality of valuation agencies is time-consuming, especially in remote geographies
- Valuation outcomes vary across agencies and lenders due to differences in risk appetite and assessment frameworks, leading to borrower dissatisfaction
- Physical property inspections for valuation and construction verification cause delays, particularly for rural or under-construction properties
- Manual verification processes are prone to errors, increasing the risk of relying on forged documents or misrepresented property details
- Lack of seamless integration among credit, legal, and technical teams results in redundant efforts and extended TAT

SOLUTION

Standardized Valuation Practices

- Empanel valuation agencies with uniform guidelines and frameworks to ensure consistent property assessments
- Practice utilization of GIS platforms (e.g., Bhuvan by ISRO) or state-specific GIS systems (e.g. Bhoomi) for real-time property verification

Digital Property Valuations

- Deploy machine learning-driven Automated Valuation Models (AVMs) to generate property valuations based on historical data, market trends, and property details
- Integrate AVMs with RERA databases and local property registries for accurate valuations
- Utilize digital inspection tools for real-time updates on property condition, dimensions, and construction progress

Integrate Technical Evaluation Platforms

- Deep integrations with Digital Technical evaluation platforms accessible to Credit and Legal teams for better collaboration and faster TAT

IMPACT

- Reduced TAT with Automated Valuation Models eliminates the 2-3 day manual process for property valuations
- Standardized reports across vendors ensure consistency and transparency for better decision-making
- Streamlined workflows across technical, credit, and legal teams eliminate redundancies, improving overall process efficiency

Lead Generation | Validation & Assessment | Underwriting | **Technical** | Legal | Disbursal | Servicing

**Applicable for pre-identified properties

3.1.5 HOME LOAN LIFECYCLE - LEGAL

CURRENT SCENARIO

Title Search Report

- Borrowers submit property ownership documents, including title deeds, sale agreements, mutation certificates, and encumbrance certificates
- Legal teams or empaneled advocates validate the chain of ownership to ensure there are no disputes, pending litigations, or encumbrances (e.g., mortgages, liens)
- Verification of compliance with zoning regulations, municipal bylaws, and government approvals (e.g., approved building plans, RERA registration).
- Title Search Report (TSR) is generated by legal teams to document the property's ownership history and highlight any legal risks associated with the title.

Legal Clearance

- Legal teams authenticate title deeds, encumbrance certificates, and sale agreements using offline and semi-digital methods
- A legal opinion, including findings from the TSR, is prepared to summarize the property's ownership validity, encumbrance-free status, and potential risks
- This report is shared with the credit and technical teams to proceed with loan approval

CHALLENGES



Preparing a TSR involves significant manual effort, especially for properties with incomplete or older records.



Dependence on unstructured and fragmented property records from SROs and local authorities further increases the TAT



Forged documents like title deeds or encumbrance certificates can lead to inaccurate TSRs, risking the lender's collateral security



Many SROs are digitizing, but manual land records still hinder quick title or encumbrance searches



Unavailability of required documents from the borrower may extend the process of Legal Opinion Report

SOLUTION

Automated Title Search Reports (TSR)

- GIS based property validation with platforms like Bhuvan (ISRO) and state-specific GIS systems (e.g., Bhoomi in Karnataka) for faster property validations
- Integrations with RERA for project verification and Digital SROs for ownership related validation reducing the human efforts
- Early stage startups focused on creating an online real estate title verifications can support in minimizing TAT by generating automated "Title Search Report" in customized formats

Centralized Legal Verification

- A centralized platform integrates records from SROs, RERA, and municipal bodies to expedite the TSR process
- Synergies to be explored for integration with RERA platforms to verify project approvals and compliance digitally
- The adoption of Digital Legal Verification platforms can accommodate legal requirements
- Automated legal report generation standardizes the report format mutually decided with Credit and Technical team for faster processing

IMPACT



Automated access to digitized records reduces TSR preparation time by 30-40%, improving overall TAT for loan approvals



Digital integration with SROs, RERA, and municipal databases minimizes the risk of relying on forged or tampered documents



Centralized workflows reduce redundancy, ensuring smoother coordination between legal, technical, and credit teams



Transparent and efficient legal evaluations increase the trust of the borrower in the loan process

Lead Generation | Validation & Assessment | Underwriting | Technical | **Legal** | Disbursal | Servicing

3.1.6 HOME LOAN LIFECYCLE - DISBURSAL

CURRENT SCENARIO	CHALLENGES	SOLUTION	IMPACT
Sanction Letter • Upon IPA acceptance by borrower and post credit, technical, & legal evaluations, the lender generates the Final Sanction Letter detailing the loan terms, disbursement conditions, and repayment structure • Borrowers review the terms and provide formal acceptance through signed acknowledgment or digital acceptance via portals	Sharing the sanction letter physically or manually following up for borrower acceptance delays the overall process	**Digital Sharing of Sanction Letters** • Share sanction letters through secure digital channels (e.g., email, customer portals) • Enable borrowers to review and provide Aadhaar-based e-signatures or digital acknowledgments to accept the terms.	Digital Signatures reduced TAT by eliminating the need for physical signatures, accelerating disbursements.

Disbursement Memo (DM)
• After receiving the borrower's acceptance of the sanction letter, the credit team prepares the Disbursement Memo (DM), summarizing:
  ◦ Loan amount approved for disbursement
  ◦ Disbursement schedule or conditions (e.g., linked to property registration or construction milestones)
  ◦ Borrower account details for fund transfer
• Before disbursement, the DM is handed over to the disbursement team, which conducts a file health check
	Both disbursement memo preparation and file health checks are largely manual, increasing the chances of errors and operational delays	**Automated Disbursement Memo (DM)**
		• Integrate rule-based automation tools to auto-generate disbursement memos once the sanction letter is accepted
		• Link the DM preparation workflow with pre-disbursement conditions to ensure compliance
		• Integrate disbursement workflows with banking APIs to automate payment reconciliation, ensuring real-time validation of fund transfers
			Efficient payment reconciliation simplifies the process and reduces manual effort.

Disbursal Payouts • Once verified, the approved loan amount is disbursed to the borrower via NEFT/RTGS, cheque, or demand draft • For under-construction properties, disbursement is milestone-based (e.g., foundation stage, superstructure completion) and linked to project progress	Borrowers are often required to sign and submit documents in person, which adds dependencies and increases TAT Payment reconciliation for disbursements is not integrated with real-time banking systems, leading to delays in validation Borrowers and internal teams lack visibility into the status of disbursement, creating gaps in communication and borrower satisfaction	**End-to-End Digitization** • The adoption of platforms like DocuSign or Adobe Sign can help replace physical signatures with legally valid digital signatures • Automate the generation and delivery of disbursement-related documents such as payment schedules and confirmation letters	Real-time visibility improves tracking and control over payment status and reconciliation

Lead Generation | Validatiion & Assessment | Underwriting | Technical | Legal | **Disbursal** | Servicing

3.1.7 HOME LOAN LIFECYCLE - SERVICING

CURRENT SCENARIO	CHALLENGES	SOLUTION	IMPACT
Monitoring & Service • Many institutions rely on traditional methods for tracking repayments, leading to delay in detection of missed payments or discrepancies • Institutions primarily depend on static reports and post-due alerts to monitor payment delays • Post-disbursement, customer service often depends on in-person visits or phone calls	After disbursal, limited engagement with customer prevents early assessment of risk of default, impacting asset quality	**Active Engagement** • Automated prompts to field staff for updates in loan account - change in interest rate, issuance of certificates, year-end charges, etc. • Automated call centers for payment reminders • Digital FAQs	Better communication, transparent processes, will improve customer engagement and reduce portfolio risk
Repayment • Lenders use e-NACH or physical NACH for repayments and may collect Security Post-Dated Cheques (SPDCs) for security	Lack of self learnable monitoring tools capable of generating pro-active alerts leads to reactive management of defaults	**Risk Management & Loan Recovery** • Early Warning Systems use payment patterns and micro-economic trends to identify risks and reduce defaults • Bureau scrubs monitor borrower indebtedness to improve portfolio health • Beat planning optimizes field staff routes for efficient collections • Escalation matrices automate physical verification for high-risk cases	Structured implementation of EWS will provide better control over Risk and proactive actionable for Default management
Prepayment and Foreclosure • Leads are reviewed by the lender's business team • Preliminary quality checks and customer due diligence are conducted • Loan documents are collected for further processing	The additional handling, verification, and processing of multiple disbursals increases operational costs	**Video Verification** • Video-based verification can streamline property verification, reducing the need for in-person documentation and physical visits	Real-time payment reconciliation ensures accurate updates on repayment status
	The retrieval of property documents after loan foreclosure is often a time-consuming and cumbersome process		Enhanced customer experience ensures faster communication and seamless digital repayment options

Lead Generation | **Validation & Assessment** | **Underwriting** | **Technical** | **Legal** | **Disbursal** | **Servicing**



Laks Duraiswamy
MD & CEO
Sundaram Home Finance

"We are at a point in the home loans and mortgage business where speed, productivity, customer service, risk management, regulatory compliances and ease of doing business- all revolve around technology. No business discussion is complete without seeking a technological solution first. Technology no longer an enabler, it is the business"

3.2 EMPATHIZE WITH CUSTOMERS



LACK OF TRANSPARENCY

Home loan process has been a frustrating process, leaving borrowers in the dark.

Lack of crucial details about the process, next steps and remaining requirements ultimately creates delays and hinders a smooth loan application experience.

Defined Loan Stages
Standardized set of stages, and proactive communication at each step would help customers anticipate the next steps and plan better

Documentation Checklist
Comprehensive & readily available checklist of all necessary documents for the home loan application

Omni Channel Consistency
Information, processes, and communication is not accessible regardless of whether a customer interacts with the lender through a website, mobile app, or in person with a representative.



PROCESS INEFFICIENCIES

The absence of a single source of truth, where all loan application data and progress are readily accessible, creates significant challenges.

Without a unified view of the process, borrowers may receive conflicting information or experience delays due to redundant data entry or missing updates

Process Standardization
Standardized process and detailed procedural guidelines has ability to improve the customer experience

Prioritising Digitisation
Digitisation of as many steps as possible to reduce the human delays & bring standardisation to the non-digital process to ensure process consistency.

Eliminating Redundant Document Collection
Multiple requests for the same documentation from borrowers, builders, and other parties



UNIFORM UNDERWRITING

One-size-fits-all approach to digital loan applications can disrupt the borrower's experience.

By offering customized digital experiences, lenders can streamline the process for each borrower type and avoid unnecessary complexities that disrupt the flow.

Behavioral Data Integration
Leverage digital footprints, such as payment behaviour or financial activity, for nuanced risk profiling.

Segment-Specific Underwriting
Design underwriting policies tailored to specific borrower segments, like self-employed professionals or first-time homebuyers.

Dynamic Policy Adjustment
Flexible BRE to use real-time data and market trends to adjust thresholds, making the process more adaptive.

04 TECHNOLOGY & DIGITAL TRENDS

OVERVIEW OF TECHNOLOGY IN HOUSING FINANCE

TECH-ENABLED LEGAL AND VALUATION INNOVATIONS

TRENDS IN DIGITAL PROCESSING & AUTOMATION

DIGITAL FIRST VS TRANSITIONING VS TRADITIONAL

CASE STUDY ON DIGITAL TRANSFORMATION

DIGITAL FIRST COMPANIES

DIGITAL TRANSITIONING ACROSS LIFECYCLE





Jyothirlatha B
CTO & CIO
Godrej Housing Finance

"End to End Digitization of secured lending for home loans in India presents substantial hurdles. Despite digital tools like e-signatures and automated data capture, regulatory mandates and unavailability of certain digital data make this process phygital with manual verifications and document checks, creating friction and causing significant customer drop-offs. Address validation remains another major pain point, as KYC documents often fail to reflect current addresses. Even with progress in digitizing land records, the heavy documentation and regulatory demands make end-to-end automation a challenge. These obstacles emphasize the need for **adaptable technology solutions** that can streamline processes, while ensuring full regulatory compliance"

4.1 OVERVIEW OF TECHNOLOGY IN HOUSING FINANCE

Digital onboarding in housing finance has evolved with **Aadhaar-based e-KYC and video KYC**, reducing borrower verification time and enabling remote completion.

Loan marketplaces such as BankBazaar and PaisaBazaar empower borrowers to compare loan offers from banks, NBFCs, and HFCs, streamlining the loan application process.

Proactive regulatory monitoring is crucial for adhering to RBI guidelines, avoiding penalties, and building customer trust. The RBI emphasizes tech-driven compliance to enhance financial stability and safeguard customer interests.

AI and ML have automated credit risk assessment, analyzing borrower data for more accurate lending decisions, while **BREs** also help in improving loan approval times, as seen with multiple lenders in the market.

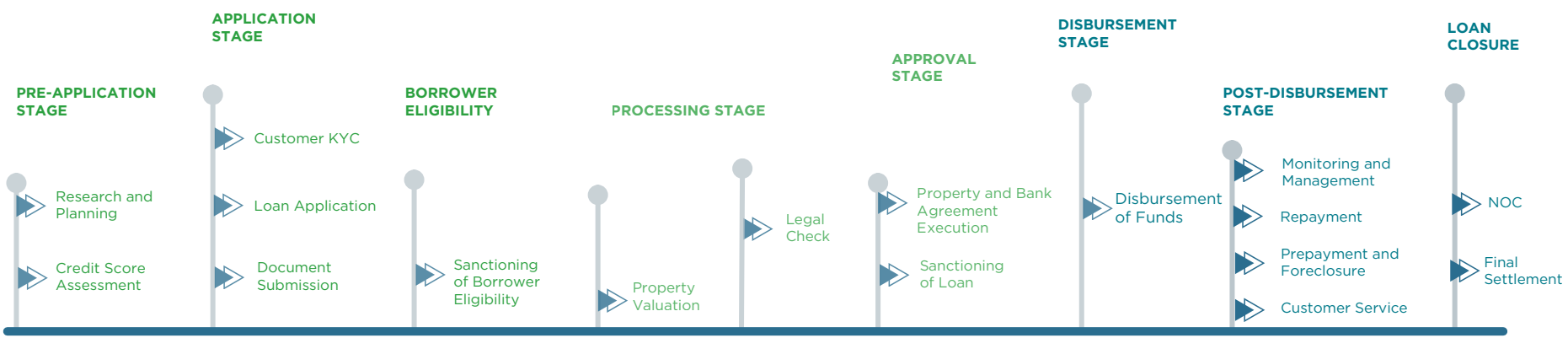
AVMs provide quick property valuations, reducing manual appraisals. **OCR and LLMs** are digitizing property due diligence processes, while e-registration and e-deeds speed up property transactions.

Property insurance can be obtained digitally, offered by several institutions, protecting against title defects, ensuring smoother transactions for both borrowers and lenders

Advanced analytics and early warning systems, including through bureau scrubs, enable continuous monitoring of loans and help lenders track delinquencies and portfolio health.

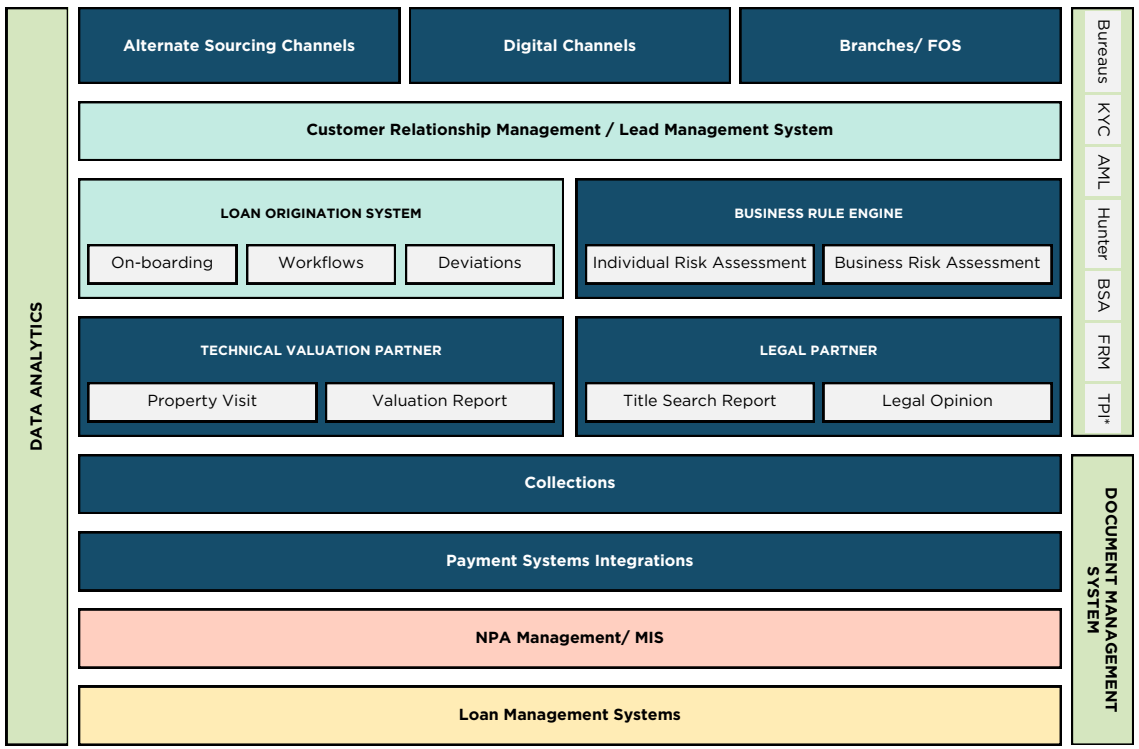
Real-time reconciliation through digital channels like **UPI and NEFT** improves loan servicing, with automated EMI alerts enhancing customer compliance.

Automated systems manage disbursement, loan closure, and NOC generation, reducing manual intervention. AI-powered tools for loan monitoring, prepayment, and foreclosure enhance risk management, while **chatbots and self-service portals** improve customer support



4.1 OVERVIEW OF TECHNOLOGY IN HOUSING FINANCE

TRADITIONAL HOME LOAN ARCHITECTURE



Human Dominated Process

**This architecture is indicative in nature*

Challenges with Current Architecture

Monolithic Architecture
Built on a single code-base, financial institutions often operate on legacy systems that lack integration across stages, and are not only inefficient, but are also not scalable

Limited Automation
Multiple processes are dependent on the manual intervention, lack of usage of AI and data analytics capabilities to automate the processes for instance, credit behaviour checks, bank statement analysis, deviation management, auto escalation for delayed cases.

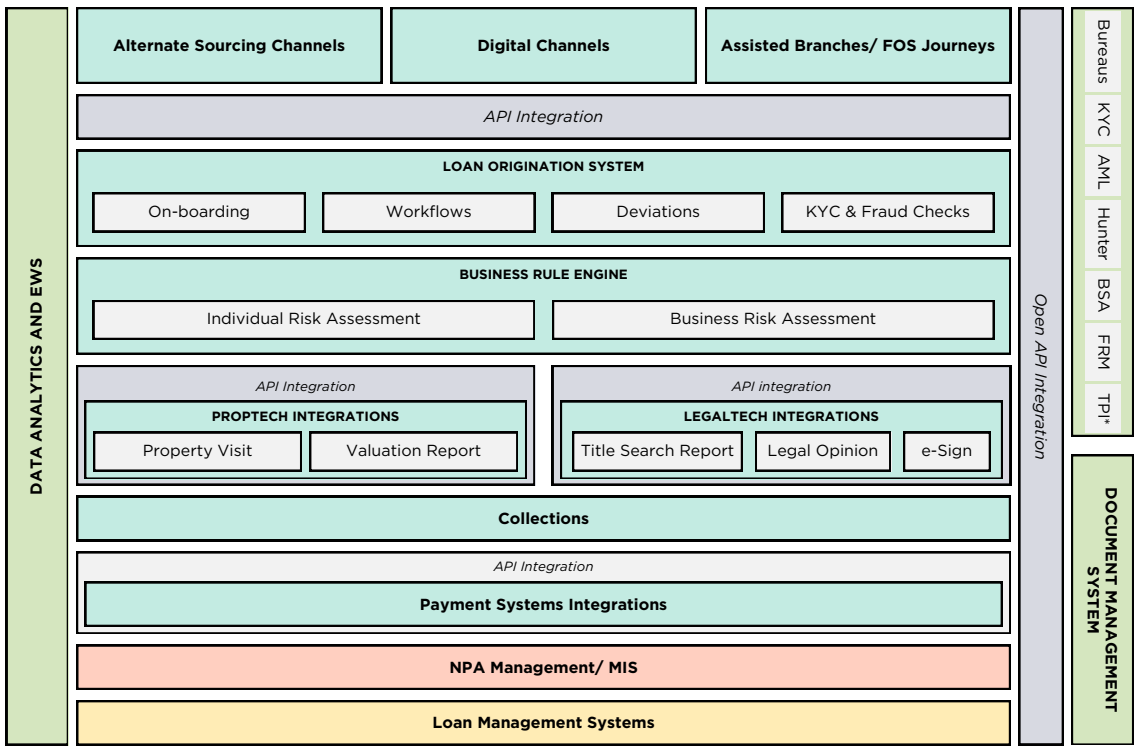
Workflow Management
Very limited adoption of workflow management for any deviation approval, mostly all the communication is carried out on the email leading to additional effort and chances of missing the timeline.

Absence of Real-time Third Party Integrations
Integration capabilities with external partners such as credit bureaus, valuation agencies, GIS systems, RERA, and payment systems are limited, resulting in repeated data submissions and poor customer experiences.

Data Analytics
Limited efforts spend on data management and analysis through cross referencing data points ensuring better understanding of the borrower during engagement period. Thorough data analysis also enables to tap the cross sell and up sell opportunities.

4.1 OVERVIEW OF TECHNOLOGY IN HOUSING FINANCE

PROPOSED HOME LOAN ARCHITECTURE



*This architecture is indicative in nature

Benefits of Digital-led Process Adoption

Centralized Loan Origination System
Integrate onboarding, workflows, deviations, and document management into a unified system to eliminate silos.

Automated Business Rule Engine
BREs are integrated within systems, utilizing business rules based on credit policies to assess borrower eligibility and creditworthiness.

API-first Approach
Enable seamless integrations with external systems, including credit bureaus, GIS platforms, digital sub-registrar offices (SROs), and payment gateways, to streamline processes.

Scalable Queue Management
Deploy queue optimization systems to prioritize tasks dynamically based on workload, borrower risk profile, and service-level agreements (SLAs).

Data Analytics
Leverage real-time data for borrower profiling, predictive analytics for creditworthiness, and portfolio monitoring for risk mitigation.

Digital Interfaces Across Channels
Provide consistent digital experiences for branches, field officers, and alternate sourcing channels through unified LOS cum customer relationship management (CRM) systems.

4.2 TECH-ENABLED LEGAL AND VALUATION INNOVATIONS

Digital Transformation in Legal Due Diligence

The legal team safeguards the lender's position by scrutinizing property documents to confirm clear ownership and identify potential encumbrances or disputes. This due diligence minimizes the risk of approving a loan on a property with unclear legal status.

AdvaRisk

Advarisk streamlines collateral management with LLMs, offering a unified API for the largest repository of translated and organized property data.

Maatrum simplifies collateral risk assessment by leveraging advanced analytics and automation, providing lenders with accurate insights and property verification.

teal.

Teal revolutionizes property due diligence with its robust data platform, offering comprehensive property insights and streamlined workflows.

Automation of Due Diligence

The current state of title deed digitization finds itself in a phase of "assisted journey", where lawyers validate the collated digital documents. As lenders gain confidence in the efficiency of these solutions, a trend towards full automation is unavoidable.

Standardization through AI and Large Language Models (LLMs)

Innovative players are leveraging Optical Character Recognition technology, LLMs & AI. Automates the process of translating property documents & matching critical data points. Multiple public sector banks use similar whitelisted platforms for efficient title deed verification.

Digital Property Valuation Tools

The technical team ensures reliability of property valuations, reduces processing delays, and supports fraud prevention, and identify potential risks in collaboration with external stakeholders as required.

clicbrics square yards

These companies provide digital property valuation tools that use AI and big data analytics for accurate assessments.

Example: PROPTIGER integrates similar digital valuation services with lending platforms for instant property valuations.

Automated Valuation Models (AVMs)

AVMs (Automated Valuation Models) utilize statistical modeling and algorithms to estimate property values by analyzing data from comparable sales, public records, and market trends. They take into account various factors such as location, property size, condition, and economic conditions to generate accurate and real-time valuations. This technology enables faster and cost-effective property assessments, often used in real estate transactions, lending, and investment decisions.

These models provide quick and reliable estimates, reducing the need for manual appraisals and enhancing efficiency.

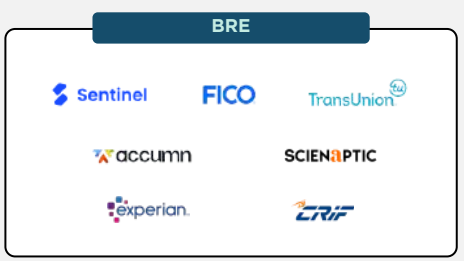
4.3 TRENDS IN DIGITAL PROCESSING & AUTOMATION

CRM



- **AI-Driven Customer Insights:** Use of AI to analyze customer data, predict needs, and offer personalized home loan recommendations, improving customer engagement and satisfaction.
- **Digital KYC and e-Signatures:** CRM systems integrating digital KYC processes and e-signatures to enable faster verification and loan approvals.
- **Automated Workflow Management:** Automation of repetitive tasks such as document verification, application status updates, and reminders, improving efficiency and reducing turnaround time (TAT).
- **Cloud-Based CRM Solutions:** Adoption of cloud-based CRM systems for scalability, flexibility, and real-time collaboration among teams across locations.

BRE



- **Scoring Models Integration:** Integrating credit scoring and alternative data scoring models (Social Media Activity, Telecom Data, Utility Payments, E-commerce and Transactional Data) into BRE to improve decision accuracy for new-to-credit (NTC) borrowers.
- **AI-Powered Rule Optimization:** Integration of AI and machine learning in BRE to dynamically optimize credit policies and underwriting rules based on borrower profiles, market conditions, and risk factors.
- **Rule Standardization:** Standardizing credit assessment and compliance rules across branches and partner ecosystems to ensure consistency and regulatory adherence.

COLLECTION PLATFORM



- **Automated Legal Case Management:** Digitized platforms to manage legal proceedings, track case statuses, and streamline document submissions for litigation in default cases.
- **Legal Risk Assessment Tools:** Advanced analytics to assess the litigation risk associated with specific loan defaults and prioritize cases accordingly.
- **Geo-Tracking for Field Agents:** Using geo-location technology to monitor and optimize the performance of on-ground recovery agents.
- **Data-Driven Recovery Strategies:** Leveraging borrower data and repayment history to design customized recovery strategies for different borrower segments.
- **Digital Negotiation and Settlement:** Enabling borrowers to negotiate repayment terms or settlements through digital platforms, improving recovery rates.

4.4 DIGITAL FIRST VS TRANSITIONING VS TRADITIONAL

FEATURES	Application Process	Customer Experience	Cost Structure	Technology Adoption
Digital First Companies	Fully online, quick approvals	User-friendly, transparent	Lower due to automation	High; embraces latest tech
Transitioning Companies	Mixed; gradual shift to online	Familiar but evolving	Higher initially; needs investment	Moderate; adapting existing systems
Traditional Companies	Manual, paper-intensive	Conventional, time-consuming	High due to manual processes	Low; minimal or no tech adoption

4.4 CASE STUDY ON DIGITAL TRANSFORMATION - ALTUM CREDO



Vikrant Bhagwat
MD & CEO
Altum Credo Home Finance

"The adoption of digital solutions is transforming the home loan experience, especially for first-time homeowners in underserved communities. By embracing a digital-first approach, companies are simplifying the entire loan process, reducing approval times, and increasing transparency. Technology-driven tools enhance operational efficiency, improve customer experiences, and ensure compliance. With digital platforms offering greater accessibility and convenience, the home loan journey is becoming faster and more streamlined. Moving forward, the integration of advanced technologies like AI will further refine the process, improving both service delivery and risk management, ultimately driving sustainable growth in the housing finance sector."

Case Study Altum Credo

Founded in 2016, Altum Credo is a housing finance company focused on providing accessible home loans to underserved populations, particularly economically weaker sections and low-income groups in semi-urban and rural India.

93% of their customer base belongs to low-income groups.

₹5-20 lakhs is the ticket size of loans
₹0.5 - 2.0 million

5-20 years is the usual term of repayment for the loans

Digital First Home Finance Company: Altum Credo

- Cloud-Based Platform for Core Operations
- Enhanced Efficiency Through Automation
- End-to-End Digital Processes
- Differentiation via Underserved Market Focus
- Cashless Transactions and Collection Management

₹10,000 mn	6	68	13,000 +
Gross AUM	States	Branches	Customers Served

4.4 CASE STUDY ON DIGITAL TRANSFORMATION - ALTUM CREDO

Loan Life-cycle before Digital Transformation



Lead Generation



Loan Application



Credit Bureau Check



Personal Discussion



Technical Assessment



Pricing & Sanction



Disbursement

Technology layer limited to policy-based pricing, cashless disbursement, and cloud-based hosting

TRANSFORMED FROM A TRADITIONAL LENDER TO A DIGITAL FIRST HOUSING COMPANY

Lead Management	Data Entry & KYC	Legal & Financial Assessment	Personal Discussion	Underwriting & Policy Control	Disbursement, eSign & Servicing
Mobile based lead to login tool	**API authentication** tools for Data Entry & KYC	Legal and property **checks**, banking **analysis, advisor logins**	Personal discussion through **mobile and pre-filled templates**	**BRE driven** underwriting, **auto deviation**, and **file tracking tools**	Integrated LMS and GL Module. **Zero cash transactions and Digital payment collection**

4.5 DIGITAL FIRST COMPANIES



₹31.4 Bn

AUM

Dr. Malcolm Athaide
Co-founder & CEO
Agrim Housing Finance

6 **States**

10 **Branches**

Digitization is significantly enhancing the home loan experience by automating key processes such as data collection, customer verification, and property checks. This shift not only improves operational efficiency but also offers a seamless and faster experience for customers. By leveraging digital tools like video calls, real-time data integration, and automated decision-making, businesses are reducing reliance on manual processes, minimizing errors, and improving accessibility. While challenges with physical verification remain, the continuous adoption of digital mediums is driving improvements in both the speed and reliability of the home loan journey.



₹33 Bn

AUM

Rohit Chokhani
Managing Director
Easy Home Finance

5 **States**

35 **Branches**

The Indian home loan process highlights a unique challenge: while unsecured loans are processed almost instantly, home loans often face significant delays. These extended timelines not only add to costs but also create hurdles for customers and lenders alike. By embracing technology and operational innovations, the industry has the potential to significantly streamline processes, enhance transparency, and reduce overall costs, paving the way for a faster, more seamless lending experience.



₹22 Bn

AUM

Babu Vellingiri
CEO
Unico Housing Finance

7 **States**

82 **Branches**

Digital transformation in home loans is not just about automating processes; it's about reimagining the entire customer journey to prioritize transparency, ease, and accessibility. By reducing touchpoints, leveraging data, and integrating self-service platforms, lenders can create an ecosystem where customers feel informed and empowered at every stage of their loan journey. This approach not only enhances customer satisfaction but also drives operational efficiency, paving the way for a more inclusive and scalable lending model.

4.6 DIGITAL TRANSFORMATIONS ACROSS LIFECYCLE

IIFL HOME LOAN

24 hr
Home Loan Disbursement

100%
Digital Customer Onboarding

30 min
Loan Processing

24%
Decrease in cost per file, FY' 22 -23

Business Rule Engine based on
- Realtime KYC Validation
- On-the-spot Banking and ITR Validation
- Credit Score
- Digital Policy

Customer Service
- Multiple Digi-channel Support (Whatsapp,
- Chatbot, Client Portal, App)
- DIY Procedure for Customer Convenience

Digital Onboarding
- Centralised Underwriting
- Digital Policy and Workflows
- Business Rule Engine Based Sanction
- and Deviations

Collections and Operations
- Extensive Collection Points
- Online Channel for Payments (Debit Card, Netbanking, Wallets UPI, UPI)
- Real Time Reconcilliation

Source: IIFL Home Finance, Annual Report '23 & '22

LIC HFL
LIC HOUSING FINANCE LTD

50%
of total IT spends on digitisation

HOMY App
for applying for loans and sanctions

75%
of monthly collection from digital and auto debit payments

35%
disbursements through the HOMY App

Digital Technologies & Processes
- Customer acquisition
- Customer appraisal
- KYC processes
- Video KYC
- E Nach

Source: LIC Housing Finance, Annual Report'23

HDFC

Digital onboarding platform
is used for direct and website based applications

94%
New loan applications through digital channels

Direct fetch information from:
- Goods and Services Tax Network
- Ministry of Corporate Affairs
- Income Tax

Tools:
- Bank Statement Information Analyzer

Source: Housing Development Finance Corporation, Annual Report'23

VASTU
HOUSING FINANCE

100%
paperless process

Proprietary System Pulse
end to end digital loan process from customer onboarding to collection

Technology and Analytics Capabilities
- Proprietary AI/ML scorecards and in-house analytics
- Predictive scorecards and collections module
- Early warning signals
- Dedupe tools
- Mobile dashboards

Source: Vastu Housing Finance, Annual Report'23



Mahesh Parasuraman
Founding Partner
Amicus Capital

"The surge in housing demand across income segments is a clear reflection of India's economic growth and evolving aspirations. However, traditional housing finance companies, reliant on manual processes and rigid underwriting models, struggle to keep pace with the needs of modern borrowers who expect seamless digital engagement. The future of housing finance lies in leveraging both traditional and alternative data sources to assess creditworthiness, ensuring financial inclusion for new-age customers. Moreover, digitization is no longer just an efficiency enhancer—it is a game changer, driving productivity, reducing costs, and managing risks effectively as they scale. In a market where product differentiation is minimal, technology will define the winners by enabling smarter underwriting and delivering superior customer experience."

05 STRATEGIC INSIGHTS

ENHANCING DIGITAL PROCESSING AND DATA MANAGEMENT
DIGITIZATION RISKS & CHALLENGES



5.1 ENHANCING DIGITAL PROCESSING AND DATA MANAGEMENT

RECOMMENDATION		IMPACT
Digital Onboarding and Document Collection	Implementing a customer-facing web/app with VKYC, OCR-based document verification, and centralized APIs for KYC and critical verifications to streamline onboarding and improve data accuracy.	IMPROVED CUSTOMER EXPERIENCE
Automation of Credit Underwriting	Using a Business Rules Engine (BRE) integrated with the Loan Origination System (LOS) to automate credit assessment based on predefined risk categories. Include real-time data integrations from credit bureaus and financial aggregators.	INCREASED OPERATIONAL EFFICIENCY
Optimizing Technical Processes	Using AI and Machine Learning (ML) to enhance technical processes. This includes property valuation, encumbrance checks, and KYC compliance using AI-driven tools.	COST SAVINGS
Optimizing Legal Processes	Using automated case management, e-filing, AI-driven risk assessment, and real-time tracking, reducing delays and improving efficiency.	FASTER TURNAROUND TIME (TAT)
E-Signature and Paperless Disbursement	Enabling e-signature functionality for signing key documents like sanction letters, loan agreements, and disbursement request forms (DRL). Providing customers with the option to digitally manage the entire disbursement process via a self-service portal.	ENHANCED EFFICIENCY & CONVENIENCE
Post-Disbursement Servicing	Implementing tools for tracking post-disbursement activities such as payment reconciliation, and portfolio monitoring through a single system.	STREAMLINED MONITORING & ACCURACY

5.2 DIGITIZATION RISKS & CHALLENGES



Digital Divide
Provide alternative channels and support for non-tech-savvy customers

The home loan customer base may include individuals with varying levels of technological proficiency, diverse borrower profiles, and unique needs, each requiring workflows tailored to their specific requirements. Ensuring consistency in service, support, and customer experience across all channels—whether online, mobile, in-person, or a combination—is a challenge lenders must address. Rather than adopting a one-size-fits-all digital approach, the solution lies in prioritizing the customer's perspective.



Limitations of Digitization in Source Data
Delays in the digitisation of legal and valuation of home loan journeys hinder process efficiency

Despite efforts to digitize home loan processes, due diligence remains a significant roadblock due to a lack of standardization and streamlined workflows in the legal and valuation aspects.

The primary challenge lies in the fragmented nature of land records and other documentation across various state governments. Standardizing these documents and enabling efficient digital access necessitates collaboration between industry players and government agencies.



Technology Integration & Reliability Challenges
Build robust, scalable, and reliable digital infrastructure

Integrating legacy systems presents a significant challenge in the digital transformation of traditional lenders. While the initial investment in new solutions can be substantial, the long-term benefits often outweigh the upfront costs. However, achieving seamless data exchange between new systems and existing legacy infrastructure remains a key obstacle.

Furthermore, any outsourcing or third-party integrations necessitate thorough due diligence and robust vendor management practices to mitigate potential risks.



Data Quality, Security, and Fraud
Inconsistent data formats, security vulnerabilities, and fragmented systems hinder seamless digital workflows

Data quality and standardization pose significant challenges in the digitization of the home loan sector. The increased reliance on digital data exposes to cyberattacks and data frauds. This could lead to incorrect underwriting and potential losses. Robust data security measures, encryption and access controls, as well as data verification are essential to not only safeguard sensitive borrower information, but also prevent frauds.

Industry-wide initiatives to standardize data formats can streamline data extraction and processing. Strong data governance practices, encompassing data quality control and access management, are essential to ensure data integrity and security.

GLOSSARY

AVM	Automated Valuation Model
AML	Anti- Money Laundering
AI	Artificial Intelligence
AA	Account Aggregator
AHF	Affordable Housing Fund
ASC	Alternate Sourcing Channels
BRE	Business Rule Engine
CAM	Credit Appraisal Memo
CERSAI	Central Registry of Securitisation Asset Reconstruction and Security Interest of India
CRM	Customer Relationship Management
CLSS	Credit Linked Subsidy Scheme
CAGR	Compound Annual Growth Rate
DILRMP	Digital India Land Records Modernization Programme
DIY	Do It Yourself
DM	Disbursement Memo
DSAs	Direct Selling Agents
EMI	Equated Monthly Instalment
EWS	Early Warning System
ETB	Existing to Bank
FI	Field Investigation
FOIR	Fixed Obligations to Income Ratio
FRM	Fraud Risk Management
FY	Financial Year commencing April 1 the previous year, and ending March 31, for the reference year
GIS	Geographic Information Systems
GST	Good and Services Tax
GDP	Gross Domestic Product
HFC	Housing Finance Company
IAY	Indira Awas Yojana
IHL	Individual Housing Loan
IPA	In-Principal Approval
ITR	Income Tax Return
KYC	Know Your Customer
LLM	Large Language Models
LIG	Low Income Group
LTV	Loan to Value
LOS	Loan Origination System
LMS	Loan Management System
MIG	Middle Income Group
NBFC	Non Banking Financial Company
NACH	National Automated Clearing House
NHB	National Housing Bank
NTB	New to Bank
NPA	Non Performing Assets
NOC	No Objection Certificate
OPDA	Open Property Data Association
OSV	Original, Seen and Verified
PBC	Principal Business Criteria
PSB	Public Sector Bank
PD	Personal Discussion
PVB	Private Sector Bank
PLI	Primary Lending Institution
PSL	Priority Sector Lending
PMAY	Pradhan Mantri Awas Yojana
PMAY (U)	Pradhan Mantri Awas Yojana (Urban)
RAY	Rajiv Awas Yojana
RBI	Reserve Bank of India
RHISS	Rural Housing Interest Subsidy Scheme
RERA	Real Estate Regulatory Authority
RM	Relationship Manager
RPS	Repayment Schedule
SARFAESI	Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act
SPDCs	Security Post-Dated Cheques
STP	Straight through process
SRO	Sub Registrar Offices
TAT	Turn Around Time
TSR	Title Search Report
UIDF	Urban Infrastructure Development Fund
UPI	Unified Payments Interface

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